What is claimed is:

1. A method comprising:

    detecting a desired symbol by allocating at least a first processing window to process the desired symbol within a first group of multipath components; and

    allocating a second processing window to process the desired symbol within a second group of multipath components.

2. The method of claim 1, comprising:

    combining a first output of the first processing window with a second output of the second processing window into a single output.

3. The method of claim 1, comprising:

    determining a length for the first processing window, wherein the length of the first processing window is greater than a length of the desired symbol.

4. The method of claim 1, comprising:

    determining a length of the second processing window, wherein the length of the second processing window is greater than a length of the desired symbol.

5. The method of claim 1, comprising:

    positioning the first and second processing windows around the desired symbol within the first group and within the second group, respectively.

6. The method of claim 1, comprising:

    grouping two or more multipath components in the first and second groups based on a delay of the desired symbol within the two or more multipath components.

7. An apparatus comprising:

    a decoder having at least a first processing window unit to detect a desired symbol within a first group of multipath components and a second processing window unit to detect the desired symbol within a second group of multipath components.

8. The apparatus of claim 7, comprising:

    a combiner to combine a first output signal of the first processing window unit with a second output signal of the second processing window unit to provide a single output signal.

9. The apparatus of claim 7, comprising:

    a processor to determine a length of a first processing window of the first processing window unit and a length of a second processing window of the second processing window unit wherein, the length the first processing window and the length of the second processing window are greater then a length of the desired symbol.

10. The apparatus of claim 9, comprising:

    a processor to position the first and second processing windows around the desired symbol within the first group and the second group, respectively.

11. The apparatus of claim 7, comprising:

    a processor to group two or more multipath components in the first and second groups based on a relative delay between the desired symbol within one multipath component and the desired symbol within another multipath component.

12. A method comprising:

grouping two or more multipath components of a received baseband signal in one or more groups for detecting a desired symbol based on a delay spread of the two or more components.

13. The method of claim 12 wherein grouping comprises:

grouping symbols within a first delay spread range in a first group; and

grouping symbols within a second delay spread range in a second group.

14. The method of claim 12 comprising:

processing samples of the received baseband signal in the group by minimum mean squared error multiuser detection.

15. The method of claim 13 comprising:

applying first and second processing windows to the first and second groups using, respectively; and

combining soft outputs of the first and second processing windows into a desired output related to a detected symbol.

16. The method of claim 12, comprising:

decoding by a processing window a desired symbol within first and second groups;

delaying a first processing result of the first group and a second processing results of the second group; and

combining the first processing result with the second processing result.

17. The method of claim 15 comprising:

assigning different sizes to the first and second processing windows.

18. The method of claim 15 comprising overlapping the first and second windows.

19. The method of claim 15 comprising:

adaptively positioning the first or the second processing windows to encompass the desired symbol based on a communication system parameter.

20. The method of claim 15 comprising:

fragmenting the desired symbol into at least first and second fragments; and

applying the first processing window to the first fragment and the second processing window to the second fragment.

21. The method of claim 12 comprising:

processing the desired symbol by applying to multipath components of the baseband signal at least one processing window to process the desired symbol in one group and at least one other processing window to process the desired symbol in two or more groups.

22. An apparatus comprising:

    a decoder having a processing window unit to decode a desired symbol within first and second groups of multipath components;

    a first delay unit to delay a first processing result of the first group; and

    a second delay unit to delay a second processing result of the second group.

23. The apparatus of claim 22 comprising:

    a combiner to combine the first processing result with the second processing result.

24. The apparatus of claim 22 wherein the processing window unit comprises a two or more processing windows to processes samples of a received baseband signal in the first and second groups by minimum mean squared error multiuser detection.

25. The apparatus of claim 23 wherein the combiner to combine the first processing result with the second processing result by using a maximal ratio combining method.

26. A wireless communication device comprising:

an internal antenna to receive a signal having multipath components;

a decoder having at least a first processing window unit to detect a desired symbol within a first group of the multipath components and a second processing window unit to detect the desired symbol within a second group of the multipath components.

27. The wireless communication device of claim 26, comprising:

a combiner to combine a first output signal of the first processing window unit with a second output signal of the second processing window unit to provide a single output signal.

28. The wireless communication device of claim 26, comprising:

a processor to determine a length of a first processing window of the first processing window unit and a second processing window of the second processing window unit wherein, the length the first processing window and the length of the second processing window are greater then a length of the desired symbol.

29. The wireless communication device of claim 28, comprising:

a processor to position the first and second processing windows of the first and second processing windows units around the desired symbol within the first group and the second group, respectively.

30. The wireless communication device of claim 26, comprising:

a processor to group two or more multipath components in the first and second groups based on a relative delay between the desired symbol within one multipath component and the desired symbol within another multipath component.

31. The wireless communication device of claim 28 wherein the first or second processing window processes samples of the received signal in the first and second groups by minimum mean squared error multiuser detection.

32. The wireless communication device of claim 27 wherein the combiner to combine the first processing result with the second processing result by using a maximal ratio combining method.

33. An article comprising: a storage medium, having stored thereon instructions, that when executed, result in:

grouping two or more multipath components of a received baseband signal in one or more groups for detecting a desired symbol based on a delay spread of the two or more components.

34. The article of claim 33 wherein the instructions when executed result in:

grouping symbols within a first delay spread range in a first group; and

grouping symbols within a second delay spread range in a second group.

35. The article of claim 33 wherein the instructions when executed result in:

processing samples of the received baseband signal in the group by minimum mean squared error multiuser detection.

36. The article of claim 34 wherein the instructions when executed result in:

applying first and second processing windows to the first and second groups using, respectively; and

combining soft outputs of the first and second processing windows into a desired output related to a detected symbol.